

CENTRAL UNIVERSITY OF HARYANA

(Established Vide Act 25 (2009) of Parliament)

VILLAGES (JANT-PALI), MAHENDERGARH, HARYANA

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M.Phil/PhD in Economics

Course Work – 20 Credits

Dissertation – 20 Credits

Sr No	Courses	Unit		Credits
1	Philosophy of science and research methodology; Data Collection	Unit 1 and 2	Research Methodology	4
2	Sampling design Theoretical Distributions	Unit 3 & 4	Research Methodology	3
3	Documentation - writing the research report	Unit 5	Research Methodology	3
4	Micro and Macro Economics International Trade, International Finance, Corporate Finance	Unit A & B		4
5	Money, Public Finance, Development and Growth Theory Indian Economic Policy	Unit C & D		3
6	Quantitative Methods in Economics	Unit E		3
			Total	20

Part I

Course on Research Methodology

Unit-1:

- Introduction to philosophy of science and research methodology
- Research Design: Need for research design, Features of a good research design, Different research design
- Experimental survey: Basic principles of experimental design
- Case studies - problems and limitations.
- Planning and implementing research projects: planning a research project, problem formulation, research strategy and methods

Unit-2:

- Methods of Data Collection: Direct method and Indirect methods
- Primary Data and Secondary Data Collection
- Data collection through questionnaires
- Data collection through schedules
- Difference between questionnaires and schedules
- Other methods of data collection and selection of appropriate method
- Problems in data collection
- Data processing: Operations and Problems in data processing
- Simple Analysis of Data: Measures of and analysis Central Tendency, Dispersion, Skewness and Koutsoxis

Unit-3:

- Sampling design: meaning and its applications
- Criteria for selecting a sampling procedure
- Characteristics of a good sample design
- Different types of sample design
- Pilot survey and pre-testing
- Measurement and scaling techniques: Measurement Scales and Sources of errors in measurement
- Test of sound measurement
- Technique of developing measurement tools
- Scale construction techniques

Unit-4:

- Theoretical Distributions: Normal, Poisson and Binomial
- Statistical Estimation and Testing of hypothesis.

- Methods of Analysis: Simple and Multiple Regression
- Multivariate Analysis: Variables in multivariate analysis and important techniques
- Factor Analysis
- Principal Component Analysis
- Path Analysis

Unit-5:

- Documentation - writing the research report
- Significance of report writing
- Different steps in writing report
- Layout of research reports
- Mechanics of writing a research report
- Precautions for writing a research report

Readings:

Kothari, C.R., Research Methodology

Kurien, C.T. (ed.), A Guide to Research in Economics.

Ghosh, B.N., Scientific Methods and Social Research.

Foercese, D.P. and Richer, S., Social Research Methods.

Feeber, R. and Verdoom, P.J. , Research Methods in Economics and Business.

Wilkinson, T.S. and Bhandarkar, P.L., Methodology and Techniques of Social Research

Enders, W., Applied Econometric Time Series, John Wiley & Sons, New York,.

Gujarati, D.N., Basic Econometrics, 4th Edition, McGraw-Hill, New York.

Wei, W.W.S., Time Series Analysis: Univariate and Multivariate Methods, Addison-Wesley Publishing Company, New York

Dunteman, G.H., Principal Components Analysis

Kim J.O. and C.W. Mueller, Factor Analysis: Statistical Methods and Practical Issues (Quantitative Applications in the Social Sciences)

Part II

Unit A: Micro and Macro Economics

- Demand Theory: Preference Based Approach under Choice under Certainty
- Consumer Demand Theory: Choice under Uncertainty
- Theory of Production - Homogeneous, Homothetic, CES, Cobb Douglas, Translog Production function
- Theory of Cost – Traditional Theory and Modern Theory of Cost including Engineering Cost
- Market Structure – Monopoly, Monopolistic Competition and Oligopoly
- Phillips curve and Inflation

- Inflation and Unemployment in the Open Economy
- Rational Expectation Model
- Mundell–Fleming Model and Dornbusch’s Overshooting Model
- New Classical Macroeconomics and New Keynesianism
- Monetarism

Unit B: International Trade, International Finance, Corporate Finance

- Modern theory of trade and trade Policy,
- Intra-Industry Trade, Free Trade versus Protection, Analysis of gains from free trade.
- Modern Investment Theory – Market efficiency and efficient market hypothesis, Capital asset pricing models (CAPM), Arbitrage pricing theories (APT), Multifactor Models, Bond Valuation and Analysis, Bond Portfolio Management
- Theories of Balance of Payment and exchange rate determination
- Policy Conflicts and Adjustment under Fixed and Flexible Exchange Rates

Unit C: Money, Public Finance, Development and Growth Theory

- Theories of under-development, Hirschman, Rostow, Lewis, Gunder Frank, Myrdal, Harris-Tadaro.
- Growth Theories-- Classical, Neo-classical, Keynesian, Post-Keynesian and New Growth Theories
- Sustainable Development
- Demand for Money - Overview of development of monetary theory and major issues
- Classical and Neo-classical theories of Money
- Money in Keynesian Framework: Liquidity Preference (L-P) Theory and Further Developments in L-P approach
- New Monetarism and its critique.
- Theory of Money Supply, Money Multiplier Process, Exogeneity of Money Supply,

Unit D: Indian Economic Policy

- Poverty, Income Distribution and Justice
- Migration and Demographic Transition
- Economic Reforms, Plans after Reforms
- Financing of Infrastructure Development, Education Sector,
- Poverty, Inequality and Growth Migration
- PSUs, Privatization and Disinvestment,
- Employment Consideration.
- Fiscal and Monetary Policy Approaches, Fiscal Federalism,
- Tax Reforms, Central Government Finances
- Financial Sector Reforms, Money and Capital market.
- Foreign Trade Liberalization, Balance of Payments, Exchange Rate
- World Trade Organization (WTO) and Indian Competition Policy.
- Patterns (structure) of India's Foreign Trade - Volume, Trends, composition, direction, etc., Export Performance and Export Competitiveness.

- India's Trade Policy: Review of Pre- and Post-liberalization - Exim Policies, Export Promotion Policies, SEZs; Tariff Structure, RTAs and FTAs.
- India and WTO: Uruguay Round, Highlights of Ministerial Meetings: Singapore to Hong Kong, Concerns of Advanced Countries (ACs) and Developing Countries (DCs), The Doha Development Agenda (DDA) and Concerns of India.
- Effects of Trade (Liberalization and Globalization) on Poverty, Inequality, Environment, Gender, Labour Standards, Technological Transfers etc.
- Public Expenditure, Structure and Growth, Wagner's Law,
- Cost Benefit Analysis, Shadow Pricing, Discount rate,
- Budgeting, Public Borrowing Public Debt, Budgeting and Zero based
- Land Reforms in India and their impact on Agrarian Structure
- The New Agricultural strategy
- The New Economic Policy and Indian Agriculture
- WTO and its implication for Indian Agriculture
- Agricultural price policy in India
- Nature and Problems of Rural Development in India
- Rural industrialization and strategies
- Target oriented rural poverty alleviation programmes
- Target oriented rural employment programmes
- Monetary Policy in India since Independence – Role and Functioning of the Reserve Bank of India.

Unit E: Quantitative Methods in Economics

- Function, limit, continuity, Differentiation and Partial differentiation
- Unconstrained and constrained optimization
- Difference equations and Integration
- Vectors, Matrices, input-output analysis;
- Linear programming - graphical and simplex methods;
- Probability and Probability Distributions
- Random variable and mathematical expectation
- Discrete, Continuous and Multivariate Distributions

Reading List:

Unit A

- Mas-Colell, Andreu, Michael D. Whinston and Jerry R. Green, (1995), Microeconomic Theory, OUP, New York.
- Jehle & Renne, Advanced Microeconomic Theory, Pearson Education, India
- Varian, Hall R., (1992), Microeconomic Analysis (Third Edition), W.W. Norton & Company, New York, London.
- Varian, Hall R., (1990), Intermediate Microeconomics, W.W. Norton & Company, New York, London.

- Kreps, David M.(1998), A Course in Microeconomic Theory, Prentice Hall, India, New Delhi (For Unit V).
- Dornbush, R. and S. Fischer (2004) – Macroeconomics (9th Ed, Tata-McGraw Hill)).
- Jha, R. (1991)– Contemporary Macroeconomic Theory and Policy; (Wiley Eastern)
- Levacic, R and A. Rebman (1986) – Macroeconomics; (2nd Ed, Macmillan).
- Mankiw, N. Gregory (2000) – Macroeconomics (4th Ed, Macmillan-Worth))
- Mankiw, N.G. and D. Romer (eds.) (1991) – New Keynesian Economics; (MIT, Cambridge)
- Begg, D. K. H. (1982), The Rational Expectation Revolution in Macro-economics”, Oxford, Allan
- Davidson, Paul (1994), Post Keynesian Macroeconomic Theory, Aldershot, UK: Edward Elgar.
- Romer, David (1996), Advanced Macroeconomics, New York: McGraw-Hill.

Unit B

- Salvatore, Dominick, International Economics, 6th Edition (1998) Prentice Hall, 7th and 8th Editions (2001 and 2004) John Wiley & Sons.
- Sodersten, Bo and Reed, G. (1994), International Economics, Macmillan Press Ltd., London
- Krugman P.R. and Obstfeld D. (1994), International Economics: Theory and Policy. Third edition. Harper Collins. New York
- Caves, Jones and Frankel (1999), World Trade and Payments, 8th edition, Addison-Wesley.
- Alexander, G.J., W.F. Sharpe and J.V. Bailey (2002), Fundamentals of Investments, Third Edition, Prentice-Hall of India Private Limited, New Delhi
- Shapiro, Alan C., Multinational Financial Management, John Wiley and Sons, 2003, Seventh Editions, Chapter3.
- Kenen, P.B, The International Economy, Prentice Hall Publication.
- Pecchioli, R.M., The Internationalization of Banking, OECD, Paris; 1983

Unit C

- Aggarwal and Singh (1958): The Economics of Underdevelopment. Oxford university Press, New Delhi
- Chakarvarti, S (1981):Development Planning: The Indian Experience. Oxford University Press, New Delhi.
- Chakarvarti, S. (1982): Alternative Approaches to a Theory of Economic Growth, Oxford University Press, New Delhi.
- Chenery, H. et-al(1987): Handbook of Development Economic V 01.1 and II. North-Holland.
- Haq, M.: Reflection on Human Development, Oxford University Press. New Delhi.
- Harris. John: (1982), .Rural Development - Theories of Peasant Economy and Agrarian change

- Meier, G.M. (1971): Leading Issues in Economic Development Oxford University Press, New Delhi.
- Myrdal. G (1968): Asian-Drama: An Enquiry into the Poverty of Nations, Pelican, London.
- Sen, A.K. (1970): Growth Economics, Penguin.
- Sen, A.K. (1981): Poverty and Famines, Allied publishers, New Delhi.
- Sen, S.K. (1984): Resources, Values & Development, Basil Blackwell. London.
- Thirwall, A. (1978): Growth and Development, Macmillan, London.

Unit D

- Ahluwalia. I.J. and I.M.D Little (Eds.), India's Economic Reforms and Development (Essays in honour of Manmohan Singh) Oxford University Press, New Delhi – 1999.
- Bardhan. P.K. (9th Edition), the Political Economy of Development in India, Oxford University Press, New Delhi – 1999.
- Ahluwalia. I.J., Industrial Growth in India, Oxford University Press, New Delhi – 1985.
- Brahmananda, P.R. and V.R Panchmukhi (Edi.), The Development Process of Indian Economy, Himalayas Publishing House, New Delhi – 1987.
- Mookherjee. D. (Edi); Indian Industry, Policies and Performance – Oxford University Press, New Delhi – 1997.
- Mundle. S: Public Finance; Policy Issues for India – Oxford University Press, New Delhi – 1999.
- Srinivasan. T.N. (Edi.) Measurement of Inequality and Poverty, Oxford University Press, Calcutta, 1997.
- Myrdal. Gunnar. Asian Drama: An Inquiry into Poverty of Nations, New Xark, Twentieth Century Fund.
- Williamson, Oliver E: the Economic Institutions of Capitalism, firms, Markets, Relational Contracting, New York: Free Press.
- Bardhan, Pranab; Poverty Agrarian Structure and Political Economy in India. Selected Essays – Oxford University Press, New Delhi – 2003.
- World Bank; Re-Energising the Agriculture Sector to Sustain Growth and Reduce Poverty – Oxford University Press, New Delhi – 2005.
- Rao Hunumanta, C.H.; Agriculture, Food Security Poverty and Environment, Essays on Post Reform in India, Oxford University Press, New Delhi – 2005.
- Duff L, Government and Market, Orient Longman, New Delhi 1997.
- Qullis. John and Jones Phillip: Public Finance and Public Choice, Oxford University Press, Second Edition 1998
- Atkinson Anthony B, Stiglitz, Josheph E; Lectures on Public Economics, Mac Graw Hill Book Co. Singapore 1980
- Musgrave, Richard A, Musgrave, Peggy B; Public Finance in theory and Practice, Tata MC Graw Hill Company, New Delhi 2004
- Chelliah Raja J; Fiscal Policy in under developed countries, George Allen and Unwin, London 1971
- Bhargava, R.K.; Some Aspects of Indian Public Finances, Uppal Publishing House, New Delhi – 1985

- American Economic Association: Reading in Fiscal Policy, George Allen and Unwin, London – 1955.
- Ashok Rudra (1965) Economics of Agricultural Production and Resource Use, Prentice Hall
- Khusro AM. (1968) Readings in Agricultural Economics, Allied, Bombay
- Kuznets.S. (1965) Economic Growth and Structure, Oxford and DBH Publishing Compnay, New Delhi.
- Schultz T.W. (1964) Transforming Traditional Agriculture, New Have, Yale Univesity Press
- Sidhu, D.S. (1990) Some Aspects of Agricultural Economics and Price Policies in India, IJAE,July-Sept.
- Suthworth, H. M. and B.F. Johnston(Ed) (1974) Agricultural Development and Economic Growth Cornell Univesity, London
- Tyagi D.S (1974) Farmers Response to Agricultural Price In India: A Study in Decision Making, Heritage Publishers New Delhi
- Y.Haymi and V.Rutan (1971) Agricultural Development-An International Perspective, Jhon Hopkins
- Witt L (1950) Role of Agriculture in Economic Development, a Review of J.I of Farm Economics, February.
- David A.M. Lea and D.P. Chaudhri (Ed), Rural Development and the State
- Harris John. (Ed). 1982, Rural Development theories of Peasant economy and agrarian change, Hutchison University library, South Africa
- Chambers Robert (1985), Rural Development putting the last first, Longman
- Basu Kaushik, Agrarian Questions, Oxford University Press
- Battacharya S.N., Rural Industrialization in India
- Rao R.V., Rural Industrialization in India
- Bagchi V., Khadi and Village Industries in the Indian Economy
- Vasant Desai., Organization and Management of Small Scale Industries
- Sundaram J.B., Rural Industrial Development
- Vasant Desai, Problems and Prospects of Small Scale Industries in India
- Mehan K K , Small Industry Entrepreneurs Handbook
- Dandekar V.M. and Rath .N. –poverty in India
- Government of India – evolution of community development programme in India
- Desai, Vasant – study of rural economics, Himalya Publishing Company, New Delhi
- Krishnamurthy V.T. –community development India
- Jain P.C. – Agriculture Reforms in India
- R.B.I Report on SFDA - -R.B.I. Mumbai
- Maheshwari S. - -Rural Development in India
- Mishra Puri – Indian Economy, Himalya Publishing House, Mumbai
- Datt, Sundaram – Indian Economy, S. Chand and Company, New Delhi
- Government of India, Ministry of Finance, Economic Devision Economic Survey-various issues
- Jain ,P.C. Agricultural Reforms in India

Unit E

- J. E. Freund (1999), *Mathematical Statistics*, 5th Edition, Prentice-Hall International.
- J. E. Freund and R. E. Walpole (1987), *Mathematical Statistics*, Prentice-Hall Inc.
- Hogg, R.V. and Craig, A.T. “Introduction to Mathematical Statistics”, Prentice-Hall International, Inc. Engle Wod Cliff, N.J., Fifth Edition, 1995.
- Mood, A.M. Graybill, F.A. and Boes, D.C., “Introduction to the Theory of Statistics”, McGraw-Hill Book Company, New York, Third Edition, 1974.
- Hogg, R. V. and A. T. Craig (1970), *Introduction to Mathematical Statistics* (3rd Edition), Macmillan Publishing Co., New York.
- Sukhatme, P. V. and B. V. Sukhatme (1970), *Sampling Theory of Survey with Applications*, Iowa State University Press, Ames.
- J. A. Rice (1995), *Mathematical Statistics and Data Analysis*, 2nd edition, Duxbury Press.
- Hogg, R.V. and Tanis E.A., “Probability and Statistical Inference” Macmillan Publishing Company, New York, Fourth Edition, 1993.
- S. C. Gupta (1993), *Fundamentals of Applied Statistics*, S. Chand and Sons, New Delhi
- D. Gujarati (2002), *Basic Econometrics*, 4th Edition, McGraw-Hill/Irwin
- D. G. Rees (1987), *Foundation of Statistics*, Chapman & Hall.
- G. M. Clarke and D. Cooke (1992), *A Basic Course in Statistics*, 3rd edition, Arnold.
- R. L. Schaeffer (1990), *Introduction to Probability and its Applications*, PWS-Kent.
- F. Daly, D. J. Hand, M. C. Jones, A. D. Lunn, K. J. McConway (1995), *Elements of Statistics*, Addison-Wesley.
- S. Ross (1976), *A First Course in Probability*, Macmillan.
- Chou, Y. (1975), *Statistical Analysis*, Holt, Reinhart and Winston, New York.
- Croxton, Crowden and Klein (1971), *Applied General Statistics*, Prentice Hall of India, New Delhi.
- Millar, J. (1996), *Statistics for Advanced Level*, Cambridge University Press, Cambridge.
- Amemiya, T. (1985), *Advance Econometrics*, Harvard University Press, Cambridge, Mass.
- Goldberger, A.S. (1998), *Introductive Econometrics*, Harvard University Press, Cambridge, Mass.
- Gujarati, D.N. (1995), *Basic Econometrics* (2nd Edition), McGraw Hill, New Delhi.
- Hill R. C, E.G. William and G.G. Judge (1997), *Undergraduate Econometrics*, Wiley, New York.
- J. Johnston, *Econometrics Methods*, McGraw Hill (Fourth Edition)
- Kennedy. P. (1998), *A Guide to Econometrics* (Fourth Edition), MIT Press, New York.
- Kmenta, J. (1997), *Element of Econometrics* (Reprint Edition), University of Michigan Press, New York.
- Maddala, G.S: (Ed.) (1993), *Econometric Methods and Application* (2 Volumes)
- Hoy, M., J. Livernois, C. McKenna, R. Rees and T. Stengos (2001), *Mathematics for Economics*, 2nd Ed. MIT Press.

- Simon, Carl P. and Blume, Lawrence (1994), Mathematics for Economists, First Edition, 1994, W.W. Norton and Company.
- A.C. Chiang and Kevin Wainwright (2005), Fundamental Methods of Mathematical Economics, McGraw-Hill.
- Chiang, A.C. (1984), Fundamental Methods of Mathematical Economics, 3rd edition, Mc-Graw Hill.
- Allen, R.G.D.(1974), Mathematical Analysis for Economists, Macmillan Press, London.
- Sydsaeter, Knut, Peter Hammond (2002), Essential Mathematics for Economic Analysis, Prentice Hall.
- Dixit, A.K. (1990), Optimization in Economic Theory, 2nd edition, Oxford University Press.
- Dowling, Edward T. (2004), Introduction to Mathematical Economics, 3rd Ed. McGraw-Hill.
- Dowling, Edward T. (1992), Schaum's Outline of Theory and Problems of Mathematics for Economists, McGraw-Hill.
- Silberberg, E.(1990), The Structure of Economics - A Mathematical Analysis, McGraw-Hill, 1990.
- M.W. Klein (2002), Mathematical Methods for Economics, 2nd Ed. Addison-Wesley.
- Pemberton M. and N. Rau (2001), Mathematics for Economists, Manchester University Press.
- Mathur, P. N. and R. Bharadwaj (Eds.) (1967), Economic Analysis in Input-Output Research, Input-Output Research Association of India, Pune.
- Hadley, G. (1962), Linear Programming, Addison Wesley Publishing Co., Massachusetts.
- Kothari, C. R. (1992), An Introduction to Operations Research, Vikas Publishing House, New Delhi.
- Yamane, Taro (1975), Mathematics for Economists, Prentice Hall of India, New Delhi.
- Baumol, W. J. (1984), Economic Theory and Operations Analysis, Prentice Hall, Englewood Cliffs, New Jersey.
- Enders, W.: “Applied Econometric Time Series“, 2nd edition, 2003
- Gujrati, D: “Basic Econometrics” 4th edition, 2004